



Year 3 – Computing Overview



Information Technology

NC Objectives	Computing strand	Skills/Knowledge	Apps/Software	Subject/Lessons
<p>Select, use and combine a variety of software (including internet services) on a range of digital devices</p> <p>Design and create a range of programs, systems and content that accomplish given goals including collecting, analysing, evaluating and presenting data and information</p>	Word processing / typing	<ul style="list-style-type: none"> Use index fingers on keyboard home, left fingers for a/s/d/f/g and right hand for h/j/k/l Edit the style and effect of my text and images to make my document more engaging and eye-catching Use cut, copy and paste to quickly duplicate and organise text 	Pic collage Seesaw Google Docs Book creator Popplet	Literacy History Geography
	Data handling	<ul style="list-style-type: none"> Create my own sorting diagram and complete a data handling activity with it using images and text Start to input simple data into a spreadsheet Create a feelings chart exploring a story or character's feelings 	Seesaw Graphs Numbers Google docs	Science Maths
	Presentations, web design and eBook creation	<ul style="list-style-type: none"> Create an interactive comic with sounds, formatted text and video Annotate an image with videos Create a simple digital timeline/mindmap Create a simple web page 	Seesaw Adobe Spark page Keynote Powerpoint	Literacy
	Animation	<ul style="list-style-type: none"> Create animations of faces to speak in role Improve stop motion animation clips with techniques like onion skinning Use animation tools in presenting software to create simple animations 	Puppetpals Chatterkid Seesaw Puppetmaster	Literacy
	Video Creation	<ul style="list-style-type: none"> Sequence clips of mixed media in a timeline with a voiceover Trim and cut film clips and add transitions in a movie trailer Create a green screen clip 	puppet Edu Doink Adobe Spark video	PSHE Literacy
	Photography and digital art	<ul style="list-style-type: none"> Confidently take and manipulate photos Create a digital image using a range of tools, pens, brushes and effects 	iPad camera Mark up Pic collage Sketches pro	Art
	Augmented reality and virtual reality	<ul style="list-style-type: none"> Create their own digital 360 image and explore it in VR Create own images and bring it into surrounds with AR 	AR makt Fimgnt AR Google expeditions	Geography
	Sound	<ul style="list-style-type: none"> Create and edit compositions using music software to create a mood Experiment with live loops to create a song 	Seesaw Keezy Voice Memos Garageband	Literacy Music



Year 3 – Computing Overview



Computer Science

NC Objectives	Computing strand	Skills/Knowledge	Apps/Software	Subject/Lessons
<p>Design, write and debug programs that accomplish specific goals including controlling or simulating physical systems</p> <p>Solve problems by decomposing them into smaller parts</p> <p>Sequence, selection and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms</p> <p>Understand computer networks including the internet; how they can provide multiple services such as the WWW and the opportunities they offer for communication</p> <p>Use search technologies effectively and appreciate how results are selected and ranked</p>	Computational thinking	<ul style="list-style-type: none"> • Create algorithms for use when programming • Decompose tasks into separate steps to create an algorithm • Identify patterns in an algorithm • Use repetition in algorithms 	Code Studio Alex	Computing unplugged week Literacy
	Coding and programming	<ul style="list-style-type: none"> • Design and create programs • Write programs that accomplish specific goals • Use repetition in programs • Work with various forms of input (e.g. speech, touch screen, keyboard) 	Code Studio Alex	Computing
	Computer networks	<ul style="list-style-type: none"> • Understand that computers in a school are connected together in a network • Understand why computers are networked • Understand the difference between the internet and the World Wide Web 		Computing unplugged

Digital literacy

Year 3 – Computing Overview

NC Objectives	Computing strand	Skills/Knowledge	Apps/Software	Subject/Lessons
<p>Use technology safely, respectfully and responsibly</p> <p>Recognise acceptable/unacceptable behaviour</p> <p>Identify a range of ways to report concerns about content and contact</p> <p>Understand computer networks including the internet</p> <p>How they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration</p> <p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>	Self-image and identity	<ul style="list-style-type: none"> Explain the term 'identity' Know how I may represent myself in different ways online Explain ways in which and why I might change my identity depending on what I am doing online (e.g. gaming; using an avatar; social media) 	Puppet Edu Chatterkid iPad Video Snap Seed iPad Camera	PSHE 'Being Me' PSHE 'Relationships' Safer Internet Day
	Online relationships	<ul style="list-style-type: none"> Understand people who have similar likes/interests can get together online Give examples of technology-specific forms of communication (e.g. emojis, acronyms, text speak) Explain the risks of communicating online with others I don't know well Explain how people's feelings can be hurt by what is said or written online Explain why I should be careful who I trust online and what information I can trust them with Explain 'knowing someone' online and might be different in real life Explain 'trusting someone online' might be different from 'liking someone online' 	Puppet Edu iPad Video Chatterkid Social Media (Snapchat, Facebook, Tik Tok) Messaging/Video Chat Translate	PSHE 'Relationships' Safer Internet Day Anti-Bullying Week
	Online reputation	<ul style="list-style-type: none"> Search for information about myself online Recognise I need to be careful before I share anything about myself or others online Know who I should ask if I am not sure if I should put something online 	Social Media School Website (class pages) School Twitter iPads	Safer Internet Day Mental Health Week
	Online bullying	<ul style="list-style-type: none"> Explain what bullying is and how people may bully others Describe rules about how to behave online and how I follow them 	Voice Memos Puppet Edu Video Recording Chatterkid	PSHE 'Relationships' PSHE 'Celebrating Differences' Anti-Bullying Week
	Managing online information	<ul style="list-style-type: none"> Use key phrases in search engines Explain what autocomplete is and how to choose the best suggestion Explain how the internet can be used to sell and buy things 	Search Engines Google Maps YouTube	All subjects Safer Internet Week Literacy



Year 3 – Computing Overview

		<ul style="list-style-type: none">Recognise the difference between a 'belief', an 'opinion' and a 'fact'	iPads Computer Voice activated Searching (Siri, Alexa)	
Health, well-being and lifestyle		<ul style="list-style-type: none">Explain why spending too much time using technology can sometimes have a negative impact on meGive some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos)	Games Films YouTube	Safer Internet Day P.E. Timetable
Privacy and security		<ul style="list-style-type: none">Only share information with people I choose to and can trustAlways ask a trusted adult if I am not sure or I feel pressuredUnderstand why passwords are important and ways of creating and keeping passwords privateDescribe how connected devices can collect and share my information with others	iPad Games Social Media Purple Mash	Safer Internet Day
Copyright and ownership		<ul style="list-style-type: none">Explain why copying someone else's work from the internet without permission can cause problem and what those problems might be	Search Engines	All Subjects